

IMMUNIZATION DURING AN INFLUENZA PANDEMIC

What is influenza?

Influenza is a common respiratory disease caused by a virus. Every year, influenza virus causes outbreaks in fall and winter. This is because each year, influenza virus changes a little so the protection, or immunity, our bodies have built up against previous viruses is not as effective.

Influenza spreads easily from person to person through coughing and sneezing and touching your eyes, mouth or nose with your hands. Influenza symptoms can appear suddenly, and include a fever, cough, fatigue, headache, muscle pain, a runny nose and a sore throat. The worst symptoms usually last about five days, but coughing can last up to two to three weeks. Sometimes children with influenza can have nausea, vomiting or diarrhea.

Although colds and other viruses may cause similar symptoms, influenza weakens a person more than other viruses. Very young children, people with some chronic medical conditions and the elderly are more likely than healthy older children or adults to get very sick, and may need to be hospitalized.

How is pandemic influenza different?

Influenza pandemics happen when a new kind of influenza virus that people have no immunity to appears, is able to spread easily from person to person, and spreads quickly around the world. Since people have no protection against the new virus, it will likely cause more illnesses and a larger number of deaths than the annual influenza.

Influenza pandemics have happened every ten to forty years for at least the last 400 years. There were three influenza pandemics last century, the last in 1968. The most severe – often called the "Spanish Influenza" pandemic – was in 1918. No one can predict exactly when a pandemic will happen, but it may be soon. That is why people and communities must prepare now, to ensure they are ready to respond when needed.

Why will it be important to get a influenza shot?

Influenza vaccine, when available, will be the primary public health intervention during a influenza pandemic. A influenza shot is the best way to control and prevent the spread of influenza. Studies show that when people get a influenza shot, they are less likely to get infected by influenza virus and, if they do get infected, they get fewer symptoms, those symptoms are less severe and they get better faster.

When will the pandemic influenza vaccine be available?

It takes some time to make vaccine, and that process cannot start until after a pandemic starts and the virus causing illness has been identified. This is because the vaccine to be effective must protect against the exact virus that is causing the pandemic. This means that at the start of a influenza pandemic, there will be no exact influenza vaccine available. It will be several months until the vaccine is available; it will be important to try to stay as healthy as possible and to know how to care for yourself and your family or friends if you or they get sick.

Canada has taken steps to help make sure that vaccine becomes available as soon as possible after a influenza pandemic starts, including:

- increasing the amount of vaccine produced and used yearly so that the gap is smaller between the amount of vaccine produced now and what will need to be produced when a pandemic occurs;
- working with vaccine makers to plan and prepare for a pandemic and be able to produce enough vaccine for every Canadian; and
- planning how to give vaccine to the people who need it most as quickly as possible.

The vaccine supply will be limited at first, as it will be distributed to provinces and territories in batches over a few months. It will be necessary to prioritize recipients for the vaccine during that time. The National Pandemic Influenza Committee will be reviewing the spread of the disease as it advances on Canada and determine which groups in the population are at highest risk. There will be many factors to consider in the prioritization process including the maintenance of the health care system, essential services and social order. Priority groups may include:

- Health care workers:
- Essential service workers like police officers, firefighters, paramedics and key decision-makers:
- People in nursing homes, long-term care facilities and other institutions;
- People with chronic medical conditions such as heart or lung disease or those with weakened immune systems;
- People 65 years old and older; and
- Children 6-23 months of age.

These groups may vary during a pandemic depending on how the virus behaves and whom it affects first and most.

Where will influenza shots for the pandemic strain be given?

Once vaccine is available, public health officials will establish mass influenza immunization clinics.

Each health authority is prepared and responsible for the immunization of its residents through local immunization clinics. Once a vaccine for the pandemic virus is available, your local public health unit can tell you the time and place that clinics will be held in your area, and who is eligible for vaccine.

Some people may have difficulty getting to the clinics. Regional health authorities will make plans to ensure that people with physical disabilities, the frail elderly and those with transportation difficulties can receive their vaccine. Plans are also being developed for vaccinating hard-to-reach people, such as those with language barriers, homeless people and those with chronic mental illness.

Why is it important to get an annual influenza shot every year?

A yearly influenza shot can keep you healthy during influenza season and also protects those around you.

Getting your influenza shot every year also helps the vaccine makers increase their capacity, which will help them speed up the production and distribution of vaccine during a pandemic.

What are the possible side effects?

Influenza vaccine is very safe. It is rare to have any side effects other than some redness or soreness in the area where the needle was given. Some people may develop mild influenza-like symptoms such as mild fever, headache, aching muscles, which can last for one to two days. This occurs especially in people receiving influenza vaccine for the first time; however symptoms are much milder than the actual illness. You cannot get influenza from influenza vaccine because the viruses used to make the vaccines are dead.

With any vaccine or drug there is a very rare (1 in a million) possibility of a shock-like allergic reaction called anaphylaxis. This can include hives, wheezy breathing, or swelling of some part of the body. If this happens, particularly swelling around the throat or sudden and severe difficulty breathing, call 911 or the emergency number listed in your local telephone book immediately.

Because the vaccine produced against a pandemic virus will be entirely new, special monitoring by health officials will be in place before and after the vaccine is given to monitor side effects and make sure it is as effective as possible.

Who should not get a influenza shot?

You should not get a influenza shot if you:

- Are suffering from a moderate or severe acute illness; or
- Have a history of anaphylactic or shock-like allergic reaction to eggs, or to a previous dose of any influenza vaccine, or to any component of influenza vaccine.

Ask your doctor, local public health nurse or the <u>BC NurseLine</u> if you have any questions about influenza vaccine and whether or not you should get vaccinated.

For more information

For more information on pandemic influenza, see the following BC HealthFiles:

#94a What is Pandemic Influenza? #94b Staying Healthy During an Influenza Pandemic

#940 Staying Healthy During an Inituenza Pandemic

#94c Self Care During an Influenza Pandemic